

# Notice of Allowability

## Application No.

09/884,894

## Examiner

Deborah K. Ware

## Applicant(s)

O'SULLIVAN, DANIEL J.

## Art Unit

1651

### -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/29/03.
2. ☒ The allowed claim(s) is/are \_\_\_\_\_.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |   |  |
|---|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                   |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>10/29/03</u> |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No. _____  | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                           |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                     |
|   | 9 <input type="checkbox"/> Other   |

### EXAMINER'S AMENDMENT

#### **In the title**

Changed the title to – ISOLATED BIFIDOBACTERIA THAT PRODUCE  
SIDEROPHORES WHICH INHIBIT GROWTH OF LACTOCOCCUS LACTIS -- .

An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on October 29, 2003, David Provence requested an extension of time for 3 MONTH(S) and authorized the Director to charge Deposit Account No. 13-4895 the required fee of \$420.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### **In the abstract**

Deleted lines 5-10, and inserted –

Isolated *Bifidobacterium* strains are obtained that secrete a siderophore that inhibits the growth of microbes in the gastrointestinal tract of an animal. Microbes inhibited include *Lactococcus lactis*, *Clostridium difficile*, and *Clostridium perfringens*. The *Bifidobacterium* or siderophore isolated from the *Bifidobacterium* can be administered to an animal. The *Bifidobacterium* is grown under iron limiting conditions when obtaining the siderophore. Microbes are inhibited by the siderophore binding iron.

--

**In the claims**

Claim 9, line 1, after "microbe" inserted --selected from the group consisting of *Lactococcus lactis*, *Clostridium difficile* and *Clostridium perfringens*. --,

line 2, before "Bifidobacterium" inserted --composition comprising an isolated-- ,

line 3, after "siderophore" inserted --that inhibits growth of *Lactococcus lactis*, wherein the composition comprises substantially no free iron, comprises an iron chelator, or a combination thereof—and further after "presence of" deleted "a" and in place thereof inserted --said-- ;

Claim 13, canceled;

Claim 14, canceled;

Claim 20, line 2, before "Bifidobacterium" inserted --composition comprising an isolated--,

line 3, after "siderophore" inserted --that inhibits the growth of *Lactococcus lactis*, wherein the composition comprises substantially no free iron, comprises an iron chelator, or a combination thereof--;

Claim 27, line 1, after "microbes" inserted --selected from the group consisting of *Lactococcus lactis*, *Clostridium difficile* and *Clostridium perfringens*. --,

line 2, before "Bifidobacterium" inserted --composition comprising an isolated-- , and further after "siderophore" inserted --that inhibits growth of *Lactococcus*

Art Unit: 1651

*lactis*, wherein the composition comprises substantially no free iron, comprises an iron chelator, or a combination thereof— ;

Claim 28, canceled;

Claim 30, line 1, after “siderophore” inserted —that inhibits the growth of *Lactococcus lactis*—, and further before “Bifidobacterium” deleted “a” and inserted —an isolated—,

line 2, before “Bifidobacterium” deleted “a” and inserted —the isolated—

;

Claim 31, canceled;

Claim 32, canceled;

Claim 33, canceled;

Claim 34, canceled;

Claim 35, canceled;

Claim 36, canceled;

Claim 37, canceled;

Claim 38, line 1, after “microbe” inserted —selected from the group consisting of *Lactococcus lactis*, *Clostridium difficile* and *Clostridium perfringens*. --,

line 2, before “composition” deleted “a” and inserted —the—and further after “siderophore” inserted —that inhibits the growth of *Lactococcus lactis*—, and after “from” deleted “a” and inserted —an isolated—;

Claim 39, canceled;

Claim 40, canceled;

Art Unit: 1651

Claim 42, canceled;

Claim 43, canceled;


Claim 44, line 2, deleted "can secrete" and inserted ~~secretes~~—and further before "inhibits" deleted "that" and inserted ~~which~~—and after "growth" inserted ~~of~~— and after "food" inserted —, wherein said composition is substantially free of iron, comprises an iron chelator, or a combination thereof -- .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 308-4245. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 308-4743. The fax phone number for the organization where this application or proceeding is assigned is 305-3592.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0196.

Deborah K. Ware  
November 4, 2003

  
DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 12851